

Claims

- [1] 1. A multimedia data reproducing apparatus comprising:
a decoder receiving AV data, decoding the AV data, and reproducing the AV data in synchronization with predetermined markup data related to the AV data; and
a markup resource decoder receiving location information of video data being reproduced by the decoder, calculating a reproducing location of the markup data related to the video, and transmitting the reproducing location of the markup data to the decoder.
- [2] 2. The apparatus of claim 1, further comprising a markup resource buffer receiving and storing the markup data.
- [3] 3. The apparatus of claim 2, wherein the markup resource buffer is a round type buffer and stores markup resource data related to the AV data in predetermined chunks units.
- [4] 4. The apparatus of claim 3, wherein the chunk comprises:
a chunk header field including synchronization information determining a reference point in time for reproducing audio; and
an audio data field in which audio frames are stored.
- [5] 5. The apparatus of claim 1, wherein the markup data is audio data.
- [6] 6. A method of receiving audio data, the method comprising:
receiving meta data including attribute information of audio data from a server; calculating an initial position information of the audio data, transmission of which is requested, according to the attribute information included in the meta data; and
transmitting the calculated initial position information to the server and receiving the audio data corresponding to the initial position.
- [7] 7. The method of claim 6, wherein the meta data comprises:
information regarding a compression format of audio data;
information regarding the number of bytes allocated to a single frame included in the audio data;
time information allocated to the single frame;
information regarding the size of chunk data, which is a transmission unit of the audio data, and information of the size of chunk head; and
location information regarding a server in which the audio data is stored.

- [8] 8. The method of claim 6, wherein the calculating the initial position information comprises:
receiving time information indicating an initial position of the audio data, transmission of which is requested;
converting the time information into information indicating the number of frames forming the audio data;
converting the information indicating the number of frames into initial position information of a chunk forming the audio data; and
calculating byte information corresponding to the initial position information of the chunk.
- [9] 9. A method of calculating a location of audio data, the method comprising:
converting initial time information of data, transmission of which is requested, into the number of frames included in the audio data;
converting the number of frames into initial position information of a chunk which is a transmission unit of the audio data; and
calculating byte position information corresponding to the initial chunk information.
- [10] 10. The method of claim 9, wherein the chunk comprises:
a chunk header field including synchronization information determining a reference point in time for reproducing audio; and
an audio data field in which frames forming the audio data are stored.
- [11] 11. A recording medium having recorded thereon audio meta data comprising:
information regarding a compression format of audio data;
information regarding the number of bytes allocated to a single frame included in the audio data;
time information allocated to the single frame;
information regarding the size of chunk data, which is a transmission unit of the audio data, and information of the size of chunk head; and
location information regarding a server in which the audio data is stored.
- [12] 12. A recording medium having recorded thereon an audio data structure of comprising:
a chunk head field including synchronization information determining a reference point in time for reproducing the audio data; and
an audio data field in which frames forming the audio data are stored.
- [13] 13. The method of claim 12, wherein the chunk header field includes at least one

of a pack header field and a system header field, which are defined in an MPEG-2 standard.

- [14] 14. The method of claim 12, wherein the chunk header field includes a TS packet header field, which is defined in an MPEG-2 standard.
- [15] 15. The method of claim 12, wherein the chunk header field includes a PES header field, which is defined in an MPEG-2 standard.
- [16] 16. A computer readable medium having recorded thereon a computer readable program for performing a method of receiving audio data comprising:
receiving meta data including attribute information of audio data from a server;
calculating an initial position information of the audio data, transmission of which is requested, according to the attribute information included in the meta data; and
transmitting the calculated initial position information to the server and receiving the audio data corresponding to the initial position.
- [17] 17. A computer readable medium having recorded thereon a computer readable program for performing a method of calculating a location of audio data comprising:
converting initial time information of data, transmission of which is requested, into the number of frames included in the audio data;
converting the number of frames into initial position information of a chunk which is a transmission unit of the audio data; and
calculating byte position information corresponding to the initial chunk information.